

25. A spread spectrum transmitter comprising:

an interface for accepting an input data stream from a DECT (Digital European Cordless Telecommunication System) MAC (medium-access control) layer, the data stream conforming to DECT physical layer packet structure;

a chip sequence transmitter generator for generating a chip sequence;

a first modulator for modulating the input data stream with the chip sequence to produce a spread spectrum signal;

a second modulator for modulating the spread spectrum signal with a carrier generator signal;

and

an antenna for transmitting the modulated spread spectrum signal over a channel.

26. The spread spectrum transmitter of claim 25 included in a user station.

27. The spread spectrum transmitter of claim 25 included in a base station.

28. The spread spectrum transmitter of claim 25 wherein the first modulator modulates the input data stream using a spreading code.

29. The spread spectrum transmitter of claim 28 wherein the chip sequence is transmitted for each data bit of the input data stream permitting correlation to occur within each bit transmitted.

30. The spread spectrum transmitter of claim 28 wherein the chip sequence is transmitted for each of a plurality of data bits of the input data stream permitting correlation to occur within a time frame allotted to each plurality of data bits transmitted.

31. The spread spectrum transmitter of claim 25 wherein the chip sequence is based on a pseudo-random spreading code.

32. A spread spectrum receiver comprising:

an antenna for receiving a modulated spread spectrum data stream from a channel; and

a spread spectrum correlator for despreading the received spread spectrum data stream and presenting the despreaded spread spectrum data stream to a DECT (Digital European Cordless Telecommunication System) MAC (medium-access control) layer, the data stream conforming to DECT physical layer packet structure.

33. The spread spectrum receiver of claim 32 included in a user station.

34. The spread spectrum receiver of claim 32 included in a base station.

35. The spread spectrum receiver of claim 32 wherein the spread spectrum correlator is an asymmetric spread spectrum correlator.

36. The spread spectrum receiver of claim 35 wherein the asymmetric spread spectrum correlator synchronizes the received spread spectrum data stream within a time frame allotted to each transmitted bit of the input data stream.

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37. The spread spectrum receiver of claim 32 wherein the spread spectrum correlator synchronizes the received spread spectrum data stream within a time frame allotted to each of a plurality of transmitted bits of the input data stream.

38. The spread spectrum receiver of claim 37 wherein the plurality of transmitted bits counts six.

39. The spread spectrum receiver of claim 32 wherein the spread spectrum correlator rapidly synchronizes the received spread spectrum data stream without generating a local reference code.

40. A spread spectrum transmitter comprising:

a means for accepting an input data stream from a DECT (Digital European Cordless Telecommunication System) MAC (medium-access control) layer, the data stream conforming to DECT physical layer packet structure;

a means for generating a chip sequence;

a first modulating means for modulating the input data stream with the chip sequence to produce a spread spectrum signal;

a second modulating means for modulating the spread spectrum signal with a carrier generator signal to produce a modulated spread spectrum signal; and

a means for transmitting the modulated spread spectrum signal over a channel.

41. The spread spectrum transmitter of claim 40 wherein the first modulating means modulates the input data stream using a spreading code.

42. The spread spectrum transmitter of claim 41 wherein the chip sequence is transmitted for each data bit of the input data stream permitting correlation to occur within a time frame allotted to each bit transmitted.

AI 43. The spread spectrum transmitter of claim 41 wherein the chip sequence is transmitted for a plurality of data bits of the input data stream permitting correlation to occur within a time frame allotted to each of the plurality of data bits transmitted.

44. The spread spectrum transmitter of claim 41 wherein the chip sequence is based on a pseudo-random spreading code.

45. The spread spectrum transmitter of claim 41 wherein the transmitter is included in one of the group comprising a user station and a base station.